



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,236	08/22/2006	Michel Paul Barbara Van Bruggen	NL 040244	1546
24737 7590 10/17/2007 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			EXAMINER SCHINDLER, TRENT L	
			ART UNIT 4137	PAPER NUMBER
			MAIL DATE 10/17/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/598,236

Applicant(s)

VAN BRUGGEN ET AL.

Examiner

Trent Schindler

Art Unit

4137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 4/25/07.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## Detailed Action

### Specification Objected

1. The following guidelines illustrate the preferred layout for the specification of a utility application.

These guidelines are suggested for the applicant's use:

#### **Arrangement of the Specification**

2. As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

3.
  - (a) TITLE OF THE INVENTION.
  - (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
  - (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
  - (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
  - (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
  - (f) BACKGROUND OF THE INVENTION.
    - (1) Field of the Invention.
    - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
  - (g) BRIEF SUMMARY OF THE INVENTION.
  - (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
  - (i) DETAILED DESCRIPTION OF THE INVENTION.
  - (j) CLAIM OR CLAIMS (commencing on a separate sheet).
  - (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
  - (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

### Claims Objected

4. Claim 10 is objected to because of the following informalities: "Beamer" is not a recognized term in the art in English. For the purposes of examination, examiner assumes "beamer" means "spotlight" in this context. Appropriate correction is required.

Rejections under 35 U.S.C. §112

Art Unit: 4137

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claim 6, 9, and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
7. Regarding claim 6, the term "substantially smaller than" is a relative term which renders the claim indefinite. The term "substantially smaller than" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The specified degree of porosity is therefore rendered indefinite by the claim.
8. Regarding claims 9 and 10, it is unclear whether "said lamp" refers to the lamp of claim 6, or the lamp mounted in a lamp assembly for projection purposes of claim 8. "Said lamp" is therefore rendered indefinite.

### Rejections under 35 U.S.C. §102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Panchula et al. (Pat. No.: US 6,456,005 B1).
11. Regarding claim 1, Panchula et al. discloses an elongate ceramic discharge vessel surrounded by an outer envelope and having a wall which encloses a discharge space containing an inert gas, such

Art Unit: 4137

as xenon, and an ionizable filling (Fig 1, and col. 2 line 50) wherein at both ends in said discharge space an electrode is arranged, between which electrodes a discharge arc can be maintained along a discharge path (col. 2, line 42), and further discloses placing the discharge vessel in contact with a suspension of inorganic particles, allowing the suspension to enter pores in said wall, thus coating the surface of said wall (col. 4, line 2).

12. The existence of the disclosed device implies a process of manufacturing same.

13. Regarding claim 2, Panchula et al. discloses the process according to claim 1, and further discloses the suspension being applied to the surface of the discharge vessel in a dipping or spraying operation (col. 4, line 1).

14. Regarding claim 3, Panchula et al. discloses the process according to claim 1, and further discloses subsequent sintering of the discharge vessel (col. 3, line 52).

## Rejections under 35 U.S.C. §103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Panchula et al. in view of Malghan et al. (Pat. No.: 5,039,550).

17. Regarding claim 4, Panchula et al discloses the process according to claim 3, but does not disclose the sintering temperature varying between 1150 and 1500° C.

Art Unit: 4137

18. However, such a range is typical for sintering similar materials (see e.g. Malghan et al. col. 2 line 1).

19. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use such a range, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller 105 USPQ 233 (CCPA 1955).

20. Regarding claim 5, Panchula et al. as applied to claim 4 discloses the process according to claim 4, and discloses further a suspension containing inorganic particles of  $\text{Al}_2\text{O}_3$  (col. 3, line 62), but does not disclose a range of grain size in the sintered material.

21. However, similar to claim 4, such a range is typical of the sintered material originating in alumina suspension meant for coatings (see, e.g., Malghan et al. col. 6 line 18).

22. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the range specified by the applicant, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller 105 USPQ 233 (CCPA 1955).

23. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Panchula et al. in view of Scott et al. (Pub. No. US 2002/0171363 A1).

24. Panchula et al. discloses an elongate ceramic discharge vessel surrounded by an outer envelope and having a wall which encloses a discharge space containing an inert gas, such as xenon, and an ionizable filling (Fig 1, and col. 2 line 50) wherein at both ends in said discharge space an electrode is arranged, between which electrodes a discharge arc can be maintained along a discharge path (col. 2, line 42), and further discloses that a coating of inorganic particles is made an integral fused part of the ceramic wall of the discharge vessel (col. 3, line 9) but does not disclose a particular porosity of the finished wall.

Art Unit: 4137

25. However, it is widely known that, in general, a low porosity in such a vessel improves the transmission of light (see, e.g., Scott et al., which is directed towards reducing porosity in a similar device for this purpose).

26. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the porosity specified by the applicant, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller 105 USPQ 233 (CCPA 1955).

27. Similarly, regarding claim 7, Panchula et al. as applied to claim 6 discloses the device of claim 6, but does not disclose ranges of total, total forward, and real in-line transmission.

28. However, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the ranges of transmissions specified by the applicant, since it is generally desirable in such devices to improve light transmission (see e.g. Scott et al, which is directed towards improving the transmission of light in a similar device), and it has further been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller 105 USPQ 233 (CCPA 1955).

29. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Panchula et al. as applied to claim 6, and further in view of Moench et al. (Pub. No.: 2002/0008851 A1).

30. Panchula et al. as applied to claim 6 discloses the device of claim 6, but does not disclose said lamp mounted in a lamp assembly for projection purposes.

31. However, Moench et al. discloses a high-intensity discharge lamp mounted in a lamp assembly for projection purposes (abstract).

32. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the teaching of Moench et al. in the device of Panchula et al., since it was known in the art that high-intensity discharge lamps are extremely common in such applications.

Art Unit: 4137

33. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Panchula et al. as applied to claim 8, and further in view of Oyama et al. (Pub. No.: US 2001/0046138 A1).

34. Panchula et al. as applied to claim 8 discloses the device of claim 8, but does not disclose the lamp mounted in a vehicle headlight.

35. However, Oyama et al. discloses a high-intensity discharge lamp mounted in a vehicle headlight (para. 25).

36. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the teaching of Oyama et al. in the device of Panchula et al., since it was known in the art that high-intensity discharge lamps are extremely common in such applications.

37. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Panchula et al. as applied to claim 8, and further in view of Honda et al. (Pub. No.: US 2001/0003411 A1).

38. Panchula et al. as applied to claim 8 discloses the device of claim 8, but does not disclose said lamp mounted in a beamer.

39. However, Honda et al. discloses the use of a high-intensity discharge lamp in a beamer (Fig. 8).

40. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the teaching of Honda et al. in the device of Panchula et al., since it was known in the art that high-intensity discharge lamps are extremely common in such applications.

## Conclusion

41. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Schreurs et al. (Pat. No.: 4,289,991) pertains to the use of suspensions of  $\text{Al}_2\text{O}_3$  particles in coatings for lighting applications. Renardus et al. (Pat. No. 5,541,480) pertains to a metal layer sintered onto the ceramic wall of a discharge vessel to achieve translucence.



Art Unit: 4137

42. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trent Schindler whose telephone number is (571) 270-3321. The examiner can normally be reached on Monday through Thursday, 7:30 am to 5:00 pm ET.

43. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Akm Ullah can be reached on (571) 272-2361. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

44. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



AKM ULLAH  
SUPERVISORY PATENT EXAMINER